

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and versions.

1 - 15. (Cancelled)

16. (Currently Amended) A method of manufacturing an electron source comprising steps of:

exposing a surface of a substrate to a sealed atmosphere, on which a plurality of electron-emitting devices are to be formed; and

introducing a gas containing carbon into the sealed atmosphere,
wherein the sealed atmosphere is formed by a chamber and the chamber is heated before said introducing step, and

wherein the introducing of a gas containing carbon is performed while exhausting the sealed atmosphere formed by the chamber within an atmosphere containing carbon.

17. (Currently Amended) A method of manufacturing an electron source comprising steps of:

exposing a surface of a substrate to a sealed atmosphere, on which a plurality of electron-emitting devices are to be formed; and

introducing a gas containing carbon into the sealed atmosphere,
wherein the sealed atmosphere is formed by a chamber and the
chamber is heated before said introducing step, to reduce moisture absorbed to a surface of
the chamber, and

wherein the introducing of a gas containing carbon is performed
while exhausting the sealed atmosphere formed by the chamber within an atmosphere
containing carbon.

18. (Currently Amended) A method of manufacturing an electron source
comprising steps of:

exposing a surface of a substrate to a sealed atmosphere, wherein an
electron-emitting region to be formed is disposed on the surface of the substrate; and

introducing a gas containing carbon into the sealed atmosphere,
wherein the sealed atmosphere is formed by a chamber and the
chamber is heated before said introducing step, and

wherein the introducing of a gas containing carbon is performed
while exhausting the sealed atmosphere formed by the chamber within an atmosphere
containing carbon.

19. (Previously Presented) The method according to Claim 18, further comprising the step of applying a voltage to an electro-conductive member, the electro-conductive member being disposed on the surface of the substrate.

20. (Currently Amended) A method of manufacturing an electron source comprising steps of:

exposing a surface of a substrate to a sealed atmosphere, wherein an electro-conductive member, in which an electron-emitting region is to be formed, is disposed on the surface of the substrate; and

introducing a gas containing carbon into the sealed atmosphere, wherein the sealed atmosphere is formed by a chamber and the chamber is heated before said introducing step, to reduce moisture absorbed to a surface of the chamber, and

wherein the introducing of a gas containing carbon is performed while exhausting the sealed atmosphere formed by the chamber within an atmosphere containing carbon.

21. (Previously Presented) The method according to Claim 20, further comprising the step of applying a voltage to the electro-conductive member.

22. (Currently Amended) A method of manufacturing an electron source comprising steps of:

exposing a surface of a substrate to a sealed atmosphere, wherein an electro-conductive member, capable of being subjected to an activation of an electron-emitting function, is disposed on the surface of the substrate; and

introducing a gas containing carbon into the sealed atmosphere, wherein the sealed atmosphere is formed by a chamber and the chamber is heated before said introducing step, and

wherein the introducing of a gas containing carbon is performed while exhausting the sealed atmosphere formed by the chamber within an atmosphere containing carbon.

23. (Previously Presented) The method according to Claim 22, further comprising the step of applying a voltage to the electro-conductive member.

24. (Currently Amended) A method of manufacturing an electron source comprising steps of:

exposing a surface of a substrate to a sealed atmosphere, wherein an electro-conductive member, capable of being subjected to an activation of an electron-emitting function, is disposed on the surface of the substrate; and

introducing a gas containing carbon into the sealed atmosphere,

wherein the sealed atmosphere is formed by a chamber and the chamber is heated before said introducing step, to reduce moisture absorbed to a surface of the chamber, and

wherein the introducing of a gas containing carbon is performed while exhausting the sealed atmosphere formed by the chamber within an atmosphere containing carbon.

25. (Previously Presented) The method according to Claim 24, further comprising the step of applying a voltage to the electro-conductive member.